# GENERATING SET
# GE 10 YSX

The images are for reference


## FEATURES

- Combined system voltage regulation: electronic AVR + Compound
- The rounded edges of the canopy designed for rainwater drainage away
- Bunded base suitable to contain any liquids leakage from engine avoiding environmental pollution
- External caps for oil and water drain
- Large doors for better and easy maintenance (air, oil, fuel filters replacement)
- Central lifting eye
- Forklift pockets
- Ready for connection to automatic transfer unit EAS (AMF + ATS)
- Meets EC directives for noise and safety


water cooled | diesel | three-phase power | electric | super silenced

| POWER RATINGS | |
|---|---|
| * Stand-By three-phase power | 9.5 kVA (7.6 kW) / 400V / 13.7 A |
| * PRP three-phase power | 9 kVA (7.2 kW) / 400V / 13 A |
| * PRP single-phase power | 4.5 kVA / 230V / 19.5A |
| * COP single-phase power | / |
| Frequency | 50 Hz |
| Cos φ | 0.8 |

* Output powers according to ISO 8528-1

### DEFINITION

**Valid declared powers up to the followings environmental conditions: temperature 25°C, altitude 100 meters above sea level**

**LTP power: stand-by power:** Maximum available power for use with variable loads for a yearly number of hours limited at 500 h. No overload is admitted.

**PRP power:** continue power with variable loads. Maximum power for use with variable loads for a yearly illimited nubers of hours.

**COP power**: continuous power with constant load. Maximum power for use with constant loads for a yearly unlimited numbers of hours.

## ENGINE 1500 RPM

| 4 STROKE, INDIRECT INJECTION, NATURAL ASPIRATED | |
|---|---|
| Model | YANMAR 3TNV80 |
| * Stand-By net power | 9 kW (12.2 hp) |
| * PRP net power | 8.2 kW (11.1 hp) |
| * COP net power | / |
| Cylinders / Displacement | 3/ 1.2 lit |
| Bore / Stroke | 80 / 84 (mm) |
| Compression ratio | 23 : 1 |
| BMEP (Brake Mean Effective Pressure : LTP - PRP) | / |
| Speed governor type | Mechanical |
| **FUEL CONSUMPTION** | |
| 110 % (Stand-by power) | 2.7 lit./h |
| 100 % to PRP | 2.5 lit./h |
| 75 % to PRP | 2 lit./h |
| 50 % to PRP | 1.6 lit./h |
| **COOLING SYSTEM** | |
| Total system cap. - only engine | / lit. - 0.9 lit. |
| Fan air flow | 32 $m^3$/min. |
| **LUBRICATION SYSTEM** | |
| Total oil system capacity | / |
| Oil capacity in sump | 1.6 lit. (min) – 3.4 lit. (max) |
| Oil consumption at full load | / |

* Output powers according to ISO 3046-1

| **EXHAUST SYSTEM** | |
|---|---|
| Maximum exhaust gas flow | / |
| Max. exhaust gas temp. | 390 °C |
| Maximum back pressure | 9.8 kPa (0.1 bar) |
| External diameter exhaust pipe | / |
| **ELECTRICAL SYSTEM** | 12 Vdc |
| Starter motor power | 1.1 kW |
| Battery charging alternator cap. | 40 A |
| Cold start | Cold start aid - 15 °C |
| With cold start aid | / |
| **AIR FILTER** | Dry |
| Combustion air flow | 0.75 $m^3$/min |
| **HEAT REJECTED AT FULL LOAD** | |
| To exhaust system | / |
| To water and oil | / |
| Radiated to room | / |
| To charge cooler | / |

# ALTERNATOR

| SYNCHRONOUS, THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS | |
|---|---|
| Continuos power | 10 kVA |
| Stand-by power | 11 kVA |
| Three phase voltage | 380-415 Vac |
| Frequency | 50 Hz |
| Cos φ | 0.8 |
| Model A.V.R. | HVR-10 KE |
| Voltage regulation acc. | ± 1.0 % |
| Sustained short circuit current | 3 In |
| Transient dip (100% load) | 17 % |
| Recovery time | / |
| Efficiency at 100% load | 84.4 % (400V - Cos φ 0,8) |
| Insulation | Class H |
| Connection - Terminals | Star - N°6 |
| Electromagnetic compatibility ( R.F.I. suppr.) | / |
| Waveform distorsion - THD | < 4 % |
| Thelephone interference - THF | / |

| REACTANCES (10 kVA - 400V) | |
|---|---|
| Direct axis synchronuos - Xd | 220 % |
| Direct axis transient - X'd | 18 % |
| Subdirect axis transient - X"d | 7.6 % |
| Quadrature axis synchronuos - Xq | 119 % |
| Quadr. axis subtransient - X"q | / |
| Negative sequence - X2 | / |
| Zero sequence - X0 | / |
| **TIME CONSTANTS** | |
| Transient - T'd | 0.027 sec |
| Subtransient - T"d | 0.005 sec |
| Open circuit - T'do | 0.335 sec |
| Armature - Ta | / |
| Short-circuit ratio Kcc | 0.81 |
| Cooling air flow | 0.068 $m^3$/sec. |
| Coupling I Bearing | Direct SAE 5 -7 ½ - N°1 |

# GENERAL SPECIFICATIONS

| | |
|---|---|
| Fuel tank capacity | 55 lt. |
| Running time (75% to PRP) | 27.5 h |
| Starter battery | 12 Vdc -62Ah |
| IP protection degree | IP 44 |

| | |
|---|---|
| * Measured acoustic power LwA (pressure LpA) | 83 dB(A) (58 dB(A) @ 7m) |
| * Guaranteed acoustic power LwA (pressure LpA) | 84 dB(A) (59 dB(A) @ 7m) |
| Performance class (ISO 8528) | G2 |

* Acoustic power according to European Directive 2000/14/CE

# CONTROL PANEL

- Controller EP6
- Fuel level gauge
- Siren
- Emergency stop buttom
- Local-Remote Start switch
- EAS plug
- TCM 35 remote control plug
- Voltmeter switch 0 - RS - ST - TR
- Circuit breaker
- ELCB-GFI (Ground Fault Interruptor)
- Output sockets: 1x400V 16A 3P+N+T I CEE - 2x230V 16A 2P+T CEE
  1x400V 16A 3P+N+T I CEE - 2x230V 16A 2P+T SCHUKO
- Earth terminal (PE)

| EP6 CONTROLLER CHARACTERISTICS | |
|---|---|
| Operating mode | OFF - MAN.- AUTO |
| Display | 4-digits display |
| LEDs | Engine is running<br>AUTO mode |
| Buttons/controls | Starter key<br>AUTO button<br>N° 5 buttons for controller programming |
| Measures | Generator voltage<br>Generator current<br>Frequency<br>Engine speed<br>Battery voltage<br>Charger battery voltage<br>Hoursmeter |
| Alarms | Low oil pressure<br>High temperature<br>Belt break<br>Low level fuel<br>Emergency stop button<br>Starting failure<br>Over-under generator voltage<br>Over-under frequency<br>Over-under speed<br>Hight-low battery voltage<br>Overload generator<br>Internal memory failure |
| Functions | Remote starting (only to AUTO)<br>Cold start aid<br>Automatic periodic test (only to AUTO)<br>Generator contactor control |

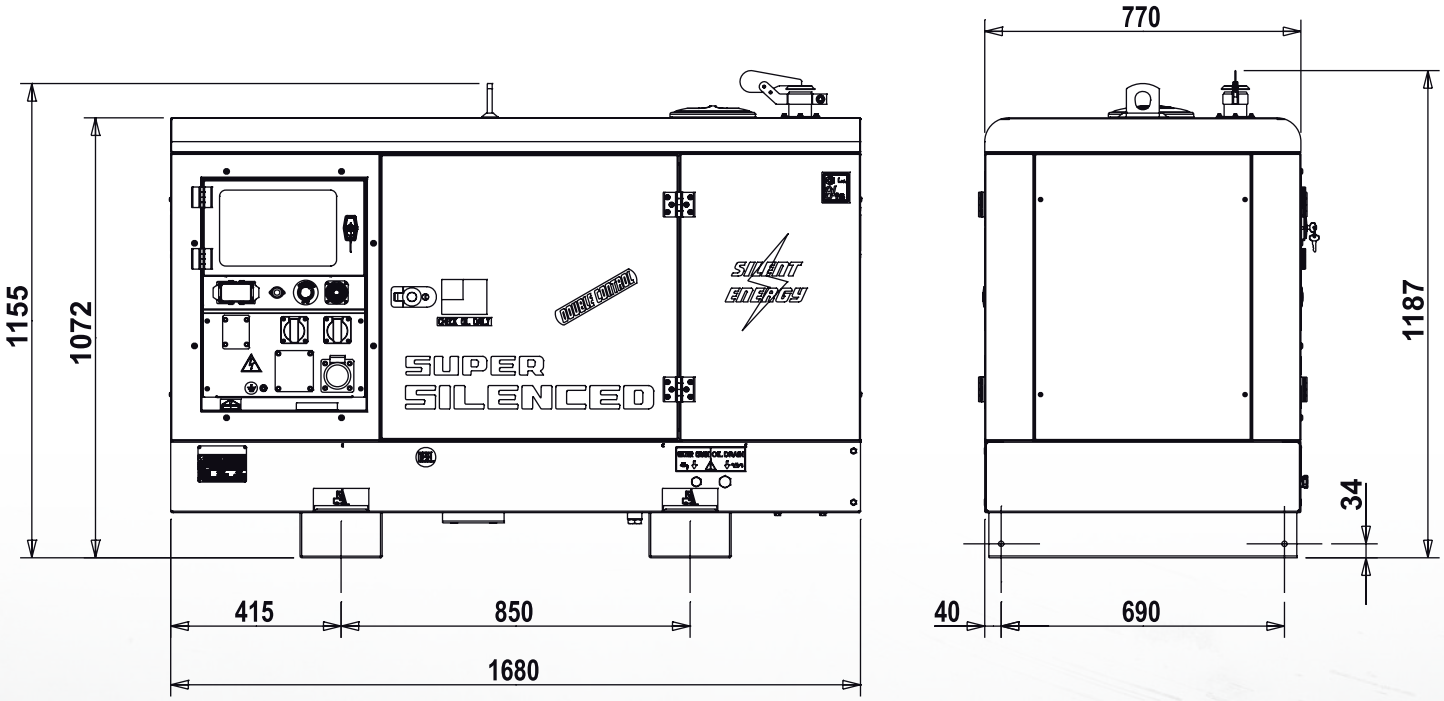
# WEIGHT - DIMENSIONS AND ACCESSORIES

GE 10 YSX

DRY WEIGHT MACHINE:
- 535 Kg (tank version 55 lt)
- 670 Kg (tank version 350 lt)

Generating set pictured may include optional accessories.

DIMENSIONS DRAW
- 1680 x 770 x 1550 mm (tank version 350 lt)
- For version with 55 **lt tank, see th**e illustrations as shown below.




## OPTIONS ON REQUEST
- Automatic transfer unit EAS 17 - 809 (25 A)
- Galvanized skid base frame
- Remote control TCM35
- Locking Fuel Cap
- Site tow CTL15
- Road trailer CTV1/O
- Road trailer CTV1/S
- Earthing kit

## VERSIONS ON REQUEST
- /

## FACTORY INSTALLATION OPTIONS
- Engine water heater WH
- Isometer
- Gauges - water temperature and oil pressure
- Spark arrestor
- Radio control
- 350 litre internal tank
- Main battery switch

## GENERAL INFORMATION

**COMPLIANCE GENERATING SETS WITH EC DIRECTIVES AND STANDARDS**
2006/42 / EC (Machines Directive)
2014/35 / EU (Low Voltage Directive)
2014/30 / EU (EMC Directive)
2000/14 / EC (Directive Acoustic Emission for machines for use outdoors)
ISO 8528 (Reciprocating internal combustion engine driven alternating current generating sets )

**ISO 9001:2008 -** Cert. 0192

**WARRANTY**
All devices are covered by the manufacturer's warranty.

The company reserves the right to change this specification without notice. For further information please contact the sales department.

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